ABSTRACT

A data scrambler is capable of scrambling N bits of data in parallel using a 2^B-1 bit scrambling sequence. The scrambler may store scrambling values of an m-sequence in a table. The table may be formed into at least two overlapping swaths of N columns, wherein each swath may store the m-sequence and the m-sequence of one swath is shifted from the m-sequence of a second swath. The scrambler may read a current swath N bits at a time and then may scramble N bits of input data in parallel using the N bits of the swath. When the swath is finished, the scrambler may shift to another swath.